

Wind and Solar Curtailment May 14, 2023

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why¹. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation².

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion³.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply⁴.
3. SelfSchCut - Local: Market dispatch of self-schedules to mitigate local congestion.
4. SelfSchCut - System: Market dispatch of self-schedules to mitigate system-wide oversupply.
5. ExDispatch - Local: Exceptional dispatch to mitigate local congestion.
6. ExDispatch - System: Exceptional dispatch to mitigate system-wide oversupply.

Note: Amounts smaller than 1 MW are filtered out for simplicity. Such small curtailments are occasionally observed when forecasts are lower than Pmin when market will de-commit the unit and send the 0 MW dispatch.

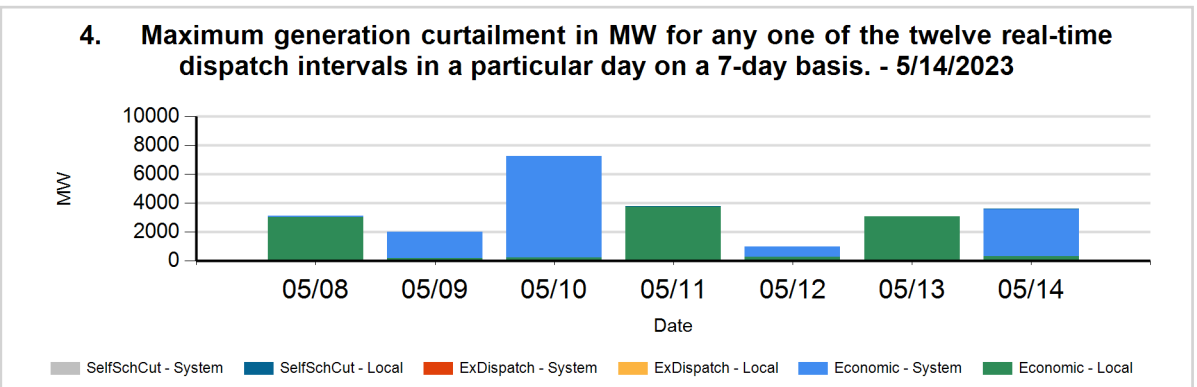
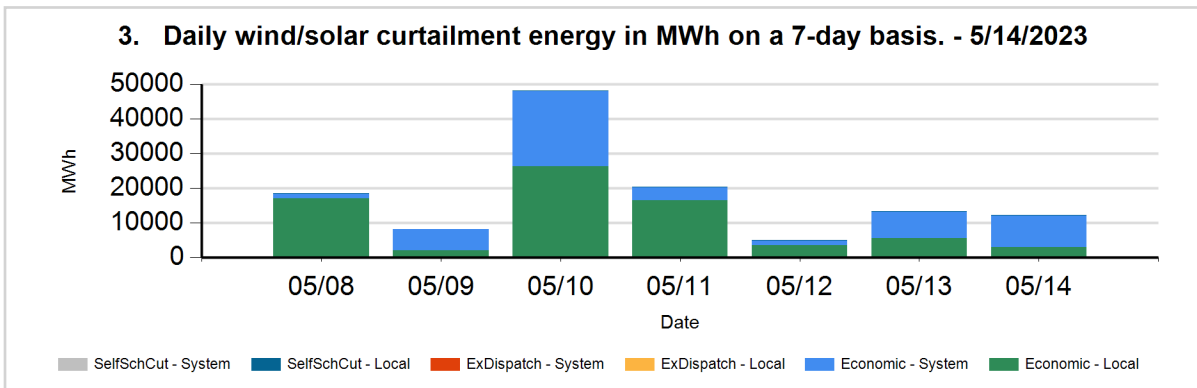
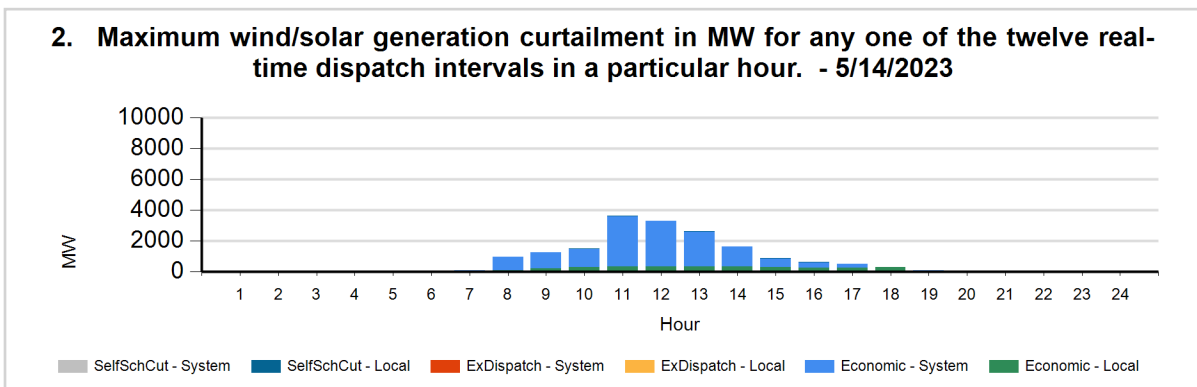
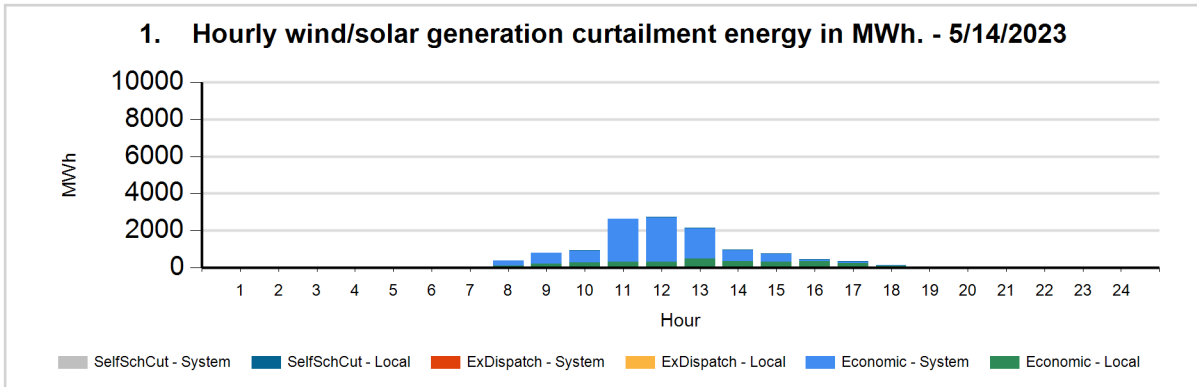
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

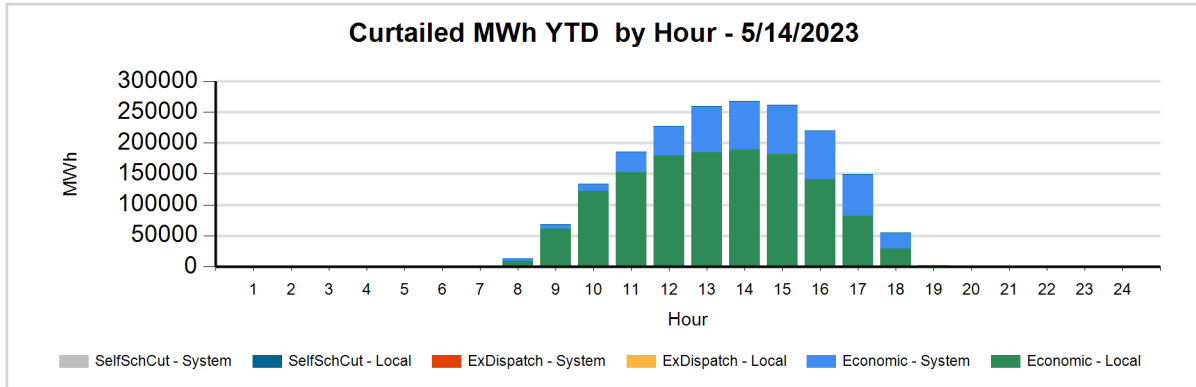
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

⁴For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

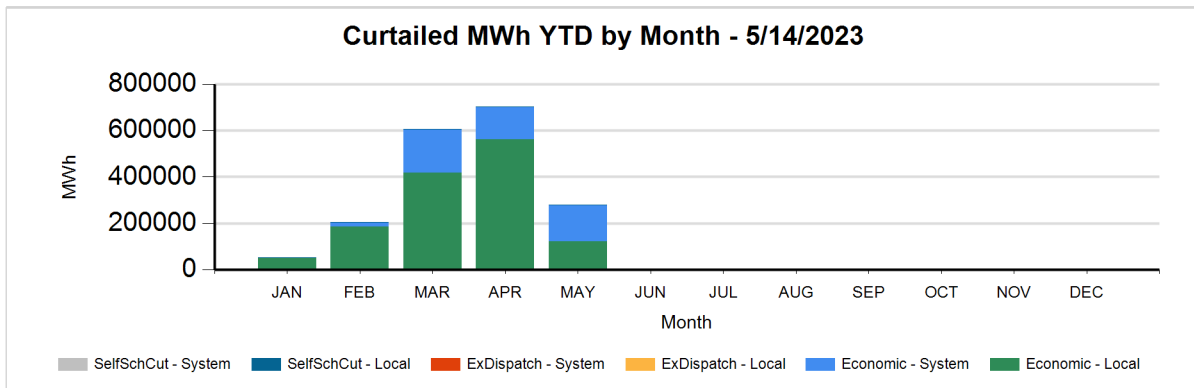
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



The following charts show hourly year to date wind and solar curtailment by category, if any.



The following charts show monthly year to date wind and solar curtailment by category, if any.



TYPE	YTD CURTAILED MWH - 5/14/2023
LocalEconomic	1,335,029
LocalSelfSchCut	493
SystemEconomic	511,233
TOTAL	1,846,755

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/14	4	Economic	Local	WIND	8	
05/14	4	Economic	System	WIND	15	49
05/14	7	Economic	Local	SOLR	5	
05/14	7	Economic	Local	WIND	3	
05/14	7	Economic	System	SOLR	12	52
05/14	7	Economic	System	WIND	5	19
05/14	8	Economic	Local	SOLR	75	66
05/14	8	Economic	Local	WIND	9	
05/14	8	Economic	System	SOLR	239	833
05/14	8	Economic	System	WIND	42	62
05/14	9	Economic	Local	SOLR	209	190
05/14	9	Economic	Local	WIND	1	
05/14	9	Economic	System	SOLR	559	1043
05/14	9	Economic	System	WIND	15	4
05/14	10	Economic	Local	SOLR	262	288
05/14	10	Economic	System	SOLR	656	1198
05/14	10	Economic	System	WIND	13	9
05/14	10	SelfSchCut	Local	SOLR	2	10
05/14	11	Economic	Local	SOLR	312	318
05/14	11	Economic	System	SOLR	2285	3251
05/14	11	Economic	System	WIND	16	35
05/14	11	SelfSchCut	Local	SOLR	0	2
05/14	12	Economic	Local	SOLR	322	321
05/14	12	Economic	System	SOLR	2387	2928
05/14	12	Economic	System	WIND	29	30
05/14	12	SelfSchCut	Local	SOLR	1	
05/14	13	Economic	Local	SOLR	480	319
05/14	13	Economic	Local	WIND	2	
05/14	13	Economic	System	SOLR	1607	2256
05/14	13	Economic	System	WIND	51	31
05/14	13	SelfSchCut	Local	SOLR	2	6

05/14	14	Economic	Local	SOLR	331	335
05/14	14	Economic	System	SOLR	550	1183
05/14	14	Economic	System	WIND	94	97
05/14	14	SelfSchCut	Local	SOLR	2	
05/14	15	Economic	Local	SOLR	302	272
05/14	15	Economic	System	SOLR	339	429
05/14	15	Economic	System	WIND	112	142
05/14	15	SelfSchCut	Local	SOLR	8	11
05/14	16	Economic	Local	SOLR	299	263
05/14	16	Economic	Local	WIND	28	
05/14	16	Economic	System	SOLR	76	206
05/14	16	Economic	System	WIND	40	118
05/14	16	SelfSchCut	Local	SOLR	4	16
05/14	17	Economic	Local	SOLR	202	266
05/14	17	Economic	Local	WIND	21	
05/14	17	Economic	System	SOLR	52	134
05/14	17	Economic	System	WIND	52	82
05/14	17	SelfSchCut	Local	SOLR	1	
05/14	18	Economic	Local	SOLR	92	188
05/14	18	Economic	Local	WIND	13	79
05/14	18	Economic	System	SOLR	0	
05/14	18	Economic	System	WIND	41	
05/14	19	Economic	Local	SOLR	6	12
05/14	19	Economic	Local	WIND	1	1
05/14	19	Economic	System	WIND	6	47

The information contained in this report is preliminary and subject to change without notice. No inference, decision or conclusion should be made based on the information in this report or any series of these reports. All values are hourly average unless otherwise stated. Questions about this report should be directed to Short-Term Forecasting at ShortTermForecasting@caiso.com.



California ISO